

REMARKS

The present amendment is submitted in response to a Non-final Office action dated February 5, 2009, which set a three-month period for response, making this amendment due by May 5, 2009.

Claims 1-11 are pending in this application.

In the Office Action, claims 1-7 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 1-7 were further rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 1006/0118341 to Huber. Claims 1, 2, and 5-7 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,595,305 to Dunn et al.

The Applicants note with appreciation the allowance of claims 3 and 4 if rewritten to overcome the rejection under Section 112, second paragraph, and to include the limitations of the base claim and any intervening claims.

Turning first to the rejection of the claims as indefinite, claim 1 has been amended to clarify the objected-to language. The convex bulge 13 or convex polygon outline 15 are not exactly the same as the rib 14. The convex bulge 13 or convex polygon outline 15 define the form or the run of the first free face section 10a. The rib 14 is defined by the first free face section 10a and an associated first cutting face section 6a. In this respect, it is correct that in Fig. 2b, the reference numerals 13 and 14 point to the same part of the bit.

It is believed that amended claim 1 clarifies the above features and addresses the rejection under Section 112, second paragraph.

Turning next to the substantive rejections of the claims, the Examiner maintains that Huber discloses the features of pending claims 1-7. The Applicants respectfully disagree.

With respect to claim 5 the Examiner refers to Exhibit A which shows Figs. 4 and 5 of Huber and to which the Examiner has added hand written comments showing what has to be seen as first/second free face section and as first/second cutting edge. According to the Examiner, Fig. 4 of Huber shows a rib with a height H. The Applicants respectfully disagree with this interpretation of Fig. 4, since the alleged rib is shown in Fig. 4 of Huber without any shading. This means with respect to Fig. 3 of Huber that the alleged rib is the outline of the cutting edge running down from the tip of the chisel to reference 3. This line is not applicable to make any statement with respect to the sculptured surface running down from the tip of the chisel of Huber. In other words the absence of shading on the alleged rib means that the shown surface is positioned below the cutting plane.

According to the present invention, the rib is defined by the first free face section (10a) and an associated first cutting face section (6a) wherein the first free face section (10a) is limited by a convex bulge (13) or a convex polygon outline (15). A convex bulge (13) or a convex polygon outline (15) is not shown in the figures of Huber. Unfortunately, the 2-dimensional embodiments of the complex geometry of modern drilling tools are often misleading.

Attached hereto as Annex 1 is an annotated figure showing Fig. 3 of Huber enlarged in which the line which is responsible for the alleged rib in Fig. 4 of Huber is marked up by many arrows.

Regarding the reference to Dunn, the Applicants submit that the Examiner has over-interpreted this reference since Dunn shows a drill body with discrete leading cutting edges wherein the alleged rib is formed by the discrete leading cutting edge and by the drill body. According to the Examiner, Dunn discloses even a vertical height of 0.1 mm to 1.0 mm.

The Applicants again disagree. Dunn does not show such a small height. According to Fig. 3 of Dunn, reference "K" shows a distance of 3.2 mm (see Dunn, column 5, line 64). Accordingly the alleged rib shown in Fig. 3 of Dunn would have a height of at least 2 mm (see Annex 2). This means that the alleged rib of Dunn is bigger than the rib according to the present invention and therefore the effect of the drill bit of Dunn is totally different of the effect of the drilling tool of the invention. The height of the rib is adapted to the depth of penetration of the drilling tool with a single impact. The small rib is built in order to obtain a drilling tool with an aggressive cutting geometry which is tailored to the depth of penetration by the drilling tool with a single impact while supporting the cutting surface in an optimum manner. A height of 0.1 mm to 0.5 mm is an optimal height of the rib for drilling in concrete or stone with a diameter of the drill of up to 30 mm (see pages 1-2 of the application).

In contrast to this specialized design of the drilling tool according to the present invention, the rotary drill bit of Dunn has a drill bit body which is

apparently designed to support the discrete leading cutting edge. In Dunn, column 1, from line 37, the drilling tool is designed to “advance forward with little wobble (i.e., side-to-side movement)” for achieving balanced drilling.

Because neither Huber nor Dunn includes all of the features of independent claim 1, the rejections under Section 102 must be withdrawn. Neither Huber nor Dunn can be an appropriate reference either under, MPEP section 2131, which indicates that to anticipate a claim a reference must teach every element of the claim in as complete detail as is contained in Applicant's claim, or under MPEP section 2143.03, since not all of Applicant's claim limitations are taught or suggested.

Also in this amendment, new claims 8-11 have been added. New claim 8 combines the features of claims 1 and 2; new claims 9 includes the features of claims 1, 2, and 5, as well as the features relating to the “height” as disclosed in paragraph [0022] of the specification; new claim 10 combines claims 1 and 3; and new claim 11 combines claims 1 and 4.

The application in its amended state is believed to be in condition for allowance. Action to this end is courteously solicited. However, should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application into condition for allowance.

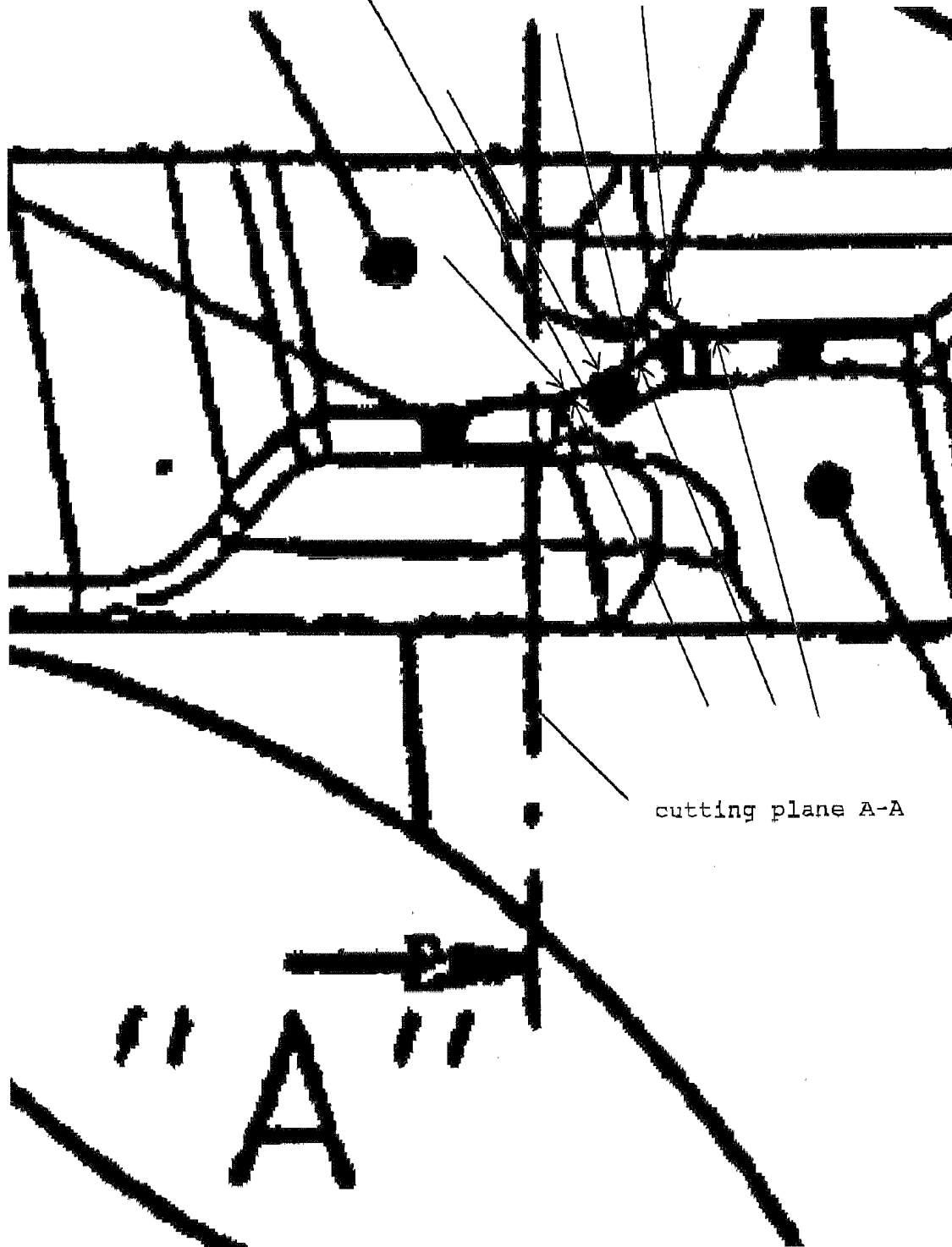
Respectfully submitted,



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cutting edge (the run of the cutting edge
is shown in figure 4 as a little hill
without shading)



HUBER figure 3 (enlarged)

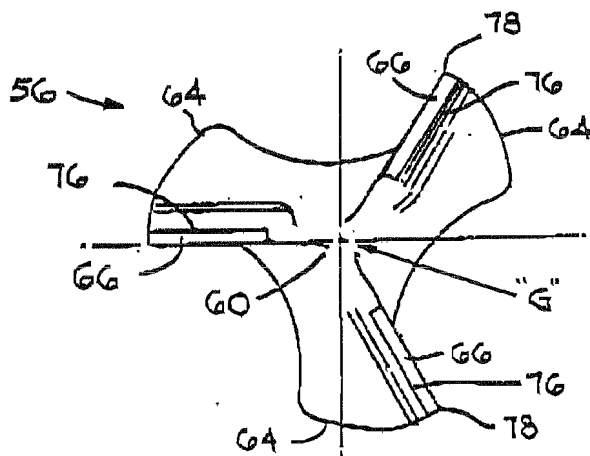


FIG. 2

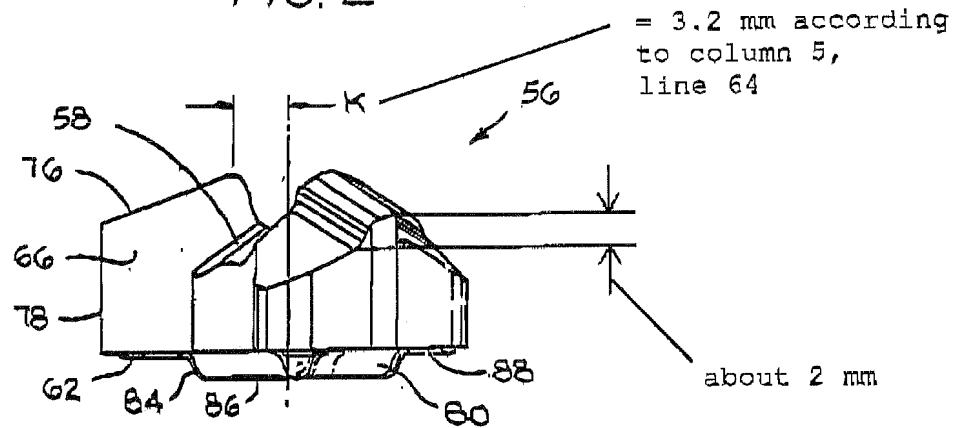


FIG. 3

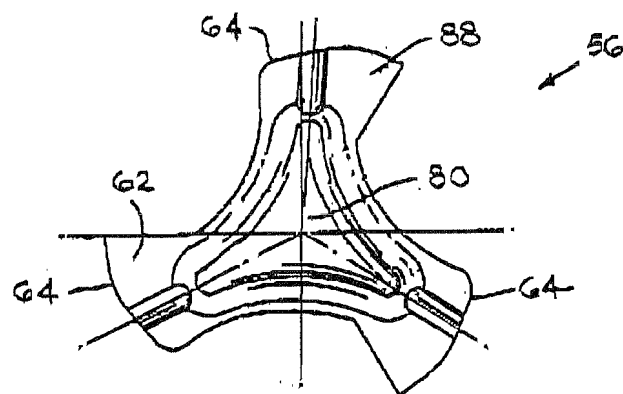


FIG. 4